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Atty. Docket No.: P68283US0

**REMARKS**

The Office Action mailed May 4, 2006, has been carefully reviewed and, by this Amendment, claims 1, 7, 10, 15 and 19 have been amended. Accordingly, claims 1-17 and 19-21 are pending in the application. Claims 1, 7 and 15 are independent. In view of the foregoing amendments and the following remarks, favorable reconsideration and allowance of this application is respectfully requested.

The Examiner rejected claims 1-17 and 19-21 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,321,026 to Lambertus in view of U.S. Patent No. 4,640,672 to Ellwood, and further rejected claims 1-17 and 19-21 as being unpatentable over U.S. Patent No. 5,593,702 to Harris et al. ("Harris") in view of Ellwood.

As set forth herein, claim 1 has been amended to clarify the subject matter being claimed. More specifically, claim 1 is directed to a water box assembly for an underwater pelletizer having a rotating shaft with cutting blades for cutting extruded pellets against a die plate. The assembly includes a generally cylindrical water box main body having a longitudinal chamber surrounding the rotating shaft and a flange on an inner periphery nearest the extruder housing. An annular

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section is coupled between the water box main body and the die plate and is secured to the housing by a first plurality of fastening elements which pass through corresponding apertures in the annular section. The *die plate interfaces directly with the cutting blades*, with the flange of the water box main body being coupled to the annular section with a second plurality of fastening elements so that the water box main body can be released from the annular section, die plate and housing by the second plurality of fastening elements, which also pass through corresponding apertures in the annular section. This is not shown or suggested by the prior art.

Lambertus discloses a water box assembly having a cutting plate 9 coupled between the water box main body 10 and the die or nozzle plate 2. The water box main body 10 is provided with a plurality of cutting knives 12 which interface with the cutting plate 9, as shown in Figure 1 of Lambertus. Hence, Lambertus does not disclose or suggest a die plate that interfaces directly with the cutting blades as set forth in claim 1.

In addition, according to Lambertus, cutting plate 9 is secured to the die plate 2 by a first plurality of fastening elements 25, with the die plate in turn being coupled to the

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housing 3 by screws (see Figure 1 of Lambertus). A second plurality of fastening elements are used to couple the flange of the water box main body 10 to the cutting plate 9, as shown by the screws adjacent reference numeral 9. While the screws adjacent reference numeral 9 pass through the flange portion of the plate 9, there are no through-passing apertures in the plate 9 through which the first plurality of fastening elements 25 can pass. Instead, elements 25 merely engage interfacing surface portions of the cutting plate 9 and die plate 2 as shown in Figure 1. Therefore Lambertus lacks any disclosure of through-passing apertures through which the first and the second pluralities of fastening elements pass as set forth in claim 1.

Harris discloses a water box for an underwater pelletizer with a die plate 37 between the water box main body (shown on the right side of Figure 3 thereof) and the adapter or housing 39. Material is extruded through orifices 47 and cut by cutting blades 57.

The Examiner has characterized the element 37 as "an annular section/inline adapter coupled between the water box main body and the die plate (Fig 3, #39)". This is not correct. Element 37 is the die plate, *not an adapter*, and element 39 is the adapter or housing, *not a die plate* (see column 5, lines 12-

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22). Hence, as shown in Figure 3 of Harris and unlike the present invention as set forth in claim 1, there is *no element between* the water box main body and the die plate 37; rather, these two elements in Harris are abutting and connected directly to one another by fastening elements (see the screw illustrated directly above reference numeral 62 at the bottom of Figure 3).

Ellwood discloses a modular extruder barrel construction and therefore lacks any teaching of a water box assembly for an underwater pelletizer, and specifically lacks any teaching of a die plate *interfacing directly* with the cutting blades on the rotating shaft of such a pelletizer. Ellwood also fails to disclose an annular section coupled between a water box main body and the die plate, as these components are not part of the extruder barrel construction thereof. Thus, whether combined with Lambertus or Harris, Ellwood fails to provide the structure that is lacking in each of these primary references such that claim 1 is not obvious in view of any combination of these three patents.

As set forth in claim 7, the claimed water box assembly for a pelletizer includes a die plate with extrusion orifices therein coupled to a housing, a driven rotary cutter blade hub supported in opposed relation to the die plate, and at least one

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cutter blade mounted on the blade hub and moving in a plane generally parallel to and closely adjacent the die plate to cut strands of material extruded through the orifices into pellets. The water box assembly has a water box main body and an inline adapter defining a cutting chamber adjacent the die plate and enclosing the cutter blade hub and cutter blade. The inline adapter is sealingly connected to the die plate, and the water box main body is sealingly connected to the inline adapter in use. The connection between the water box main body and the inline adapter is effected by a plurality of elongated fastening elements passing through a corresponding plurality of substantially circular aligned apertures in a flange of the water box main body, in the inline adapter and in the die plate such that *each fastening element interconnects all three of the water box main body, the inline adapter and the die plate*. This is not shown by the prior art.

In Lambertus, cutting plate 9 is secured to the die plate 2 by the first plurality of fastening elements 25, with the die plate in turn being coupled to the housing 3 by screws shown at the top and bottom of the housing (see Figure 1 of Lambertus).

A second plurality of fastening elements are used to couple the flange of the water box main body 10 to the cutting plate 9, as

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shown by the screws adjacent reference numeral 9. There are no aligned through-passing apertures in the water box main body 10, the cutting plate 9 and the die plate 2 through which these three components are interconnected by a common fastening element as is set forth in claim 7.

Harris also lacks any teaching of the aligned apertures and fastening elements as provided in claim 7. As already discussed, the upper and lower screws of Harris which are used to connect the housing element 39 to the die plate 37, and the die plate 37 to the water main box, respectively, are not in alignment with one another. Hence, neither the upper screws nor the lower screws in Harris are configured such that each connects *all three of the water box main body, the inline adapter and the die plate* in the manner set forth in claim 7.

Claim 15 is in condition for allowance for at least the same reasons as claim 7, having fastening elements that each interconnect the water box main body, the inline adapter and the die plate. In addition, as set forth in claim 15, an additional set of fastening elements are fastened between the extruder inlet housing and the adapter and pass through and/or into aligned apertures in each of the housing, the die plate and the inline adapter such that each of said additional fastening elements

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sealingly connects the extruder inlet housing, the die plate and the inline adapter together. This is also not shown by the prior art.

Accordingly, for at least the foregoing reasons, claims 1, 7 and 15 are patentable over the prior art. Claims 2-6, 8-14, 16, 17 and 19-21 are also in condition for allowance as claims properly dependent on an allowable base claim and for the subject matter contained therein.

With this Amendment it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any questions or comments, the Examiner is cordially invited to telephone the undersigned attorney so that the present application can receive an early Notice of Allowance.

Respectfully submitted,

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